

viral transformation may have been more suited to the first volume but it does usefully draw together the data on a number of different tumour viruses and assesses the significance of the in vitro tyrosine protein kinase activity in relation to viral transformation. The chapter on bacteriophage T4 infection mechanisms seems excessively long (almost 100 pages and 571 references) to introduce people to this subject. This chapter may be responsible for the omission of an article on interferon, as promised in volume 1, which might have provided a useful link between the proteinaceous toxins and the viruses.

The mechanism by which these toxins and

viruses affect cell function may give clues to aspects of normal cell regulation. Indeed, the phenomenon of protein phosphorylation on tyrosine residues was first observed in the study of viral transforming proteins but has now been implicated in the pathways of insulin and epidermal growth factor function. However, I am not convinced that the collection of material in this book represents a sufficiently related set of subjects or that they are relevant enough to normal cell regulation to attract a wide audience in these days of tightly constrained library budgets.

G.J. Belsham

Isoenzymes

by D.W. Moss

Chapman and Hall; London, New York, 1982

x + 204 pages. £ 15.00

This book provides a lucid account of the important aspects of the subject. Both science and medical students will find this a useful introduction to a topic that is now recognised as an integral part of Biochemistry.

Chapters on the origins and structures of isoenzymes and on the differences in properties between the various forms of a particular enzyme provide comprehensive accounts of present knowledge in these areas, whilst the useful applications of this data are well illustrated in the chapter devoted to the diagnostic uses of isoenzyme technology in clinical medicine. This section demonstrates nicely how complimentary advances in methodology and in basic knowledge of the properties of isoenzymes has allowed the specific identification of diseased organs.

A chapter on the forensic applications of isoenzyme techniques might usefully have been included, perhaps at the expense of that on Phylogeny, which authors on the subject of isoenzymes seem compelled to include, but which does not appear to have progressed since the so-called pioneering days of Markert and Moller. The same seems to be true of specific biological functions for different isoenzyme forms of particular enzymes; present knowledge warrants only a few pages on this topic. However, it is early days yet as it is less than 30 years since Jermyn and Thomas experienced some difficulty in persuading the editors of the *Biomedical Journal* of the existence of multiple forms of enzymes.

N. Spencer